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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,978	10/05/2000	Nobuhiko Eguchi	FUJI 17.823	8280

7590 10/10/2003

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EXAMINER

TRAN, QUOC DUC

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 10/10/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/679,978

Applicant(s)

EGUCHI ET AL.

Examiner

Quoc D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/5/2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/679,978.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-9 and 17-19 are objected to because of the following informalities: the term “can” should be corrected for improvement of claim language. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 5-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Kennedy et al (5,857,011).

Consider claim 1, Kennedy et al teach a testing method which is used to perform a test of an information notification service function of a switching apparatus which can provide the information notification service in compliance with a predetermined information notification service specification (see abstract), said testing method comprising a step of performing an information notification service function between a testing apparatus which can emulate a plurality of types of information reception terminals for different information notification service specifications (col. 5 lines 58-64; col. 10 lines 47-65) and the switching apparatus which can

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connect a subscriber side two-wire in a subscriber line circuit in said switching apparatus to said testing apparatus (col. 9 line 47; col. 11 lines 11-25).

Consider claim 5, Kennedy et al teach a testing method which is used to perform a test of an information notification service function of a switching apparatus which can provide the information notification service in compliance with a predetermined information notification service specification (see abstract), using a termination resistor with a high resistance connected to a test line in a subscriber line circuit, a testing apparatus connected to a call line of a switching apparatus to send and receive test data using a voice band signal and said switching apparatus, said call line of which is connected to said testing apparatus (col. 13 line 66 – col. 14 line 8), said method comprising steps of: sending an analog signal corresponding to test data from said testing apparatus to said termination resistor through said call line of said switching apparatus (col. 11 lines 11-19); reflecting said analog signal using said resistor; receiving a reflected analog signal by said termination resistor by means of said testing apparatus through said call line of said switching apparatus; and analyzing received data corresponding to said reflected analog signal (col. 11 line 48 – col. 12 line 37).

Consider claim 6, Kennedy et al teach wherein said switching apparatus can connect said test line to said testing apparatus, and said termination resistor is provided in said testing apparatus (col. 11 lines 11-19).

Consider claim 7, Kennedy et al teach wherein said testing method further comprising a step of encoding said test data using an FSK signal or a DTMF signal (col. 11 lines 11-46).

Consider claim 8, Kennedy et al teach a testing method which is used to perform a test of an information notification service function of a switching apparatus which can provide the

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information notification service in compliance with a predetermined information notification service specification (see abstract), said method comprising steps of; translating a dialed number from a subscriber by means of said switching apparatus when ringed (col. 2 lines 60-64); capturing said dialed number when a translated number by said translating step is equal to a predetermined number; and, notifying said dialed number to said subscriber (col. 2 line 60 – col. 3 line 4).

Consider claim 9, Kennedy et al teach a testing method which is used to perform a test of an information notification service function of a switching apparatus which can provide the information notification service in compliance with a predetermined information notification service specification (abstract), using a switching apparatus which can connect a test line from a subscriber line circuit to a reception terminal for a test (col. 9 line 60 – col. 10 line 4), said method comprising steps of: calling from one subscriber terminal to another subscriber terminal connected to said subscriber line circuit to be tested; and, displaying an information on said subscriber terminal that called in said calling step on said reception terminal for said test (col. 13 line 29 – col. 14 line 36).

Consider claim 10, Kennedy et al teach the testing method further comprising the steps of; translating a dialed number from said subscriber by means of said switching apparatus when ringed; capturing said dialed number when a translated number by said translating step is equal to a predetermined number; and, notifying said dialed number to said subscriber (col. 2 line 60 – col. 3 line 4).

4. Claims 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ta et al (6,272,174).

Consider claim 11, Ta et al teach an FSK signal demodulation (abstract) method comprising: a zero crossing point calculation step; a zero crossing point interval calculation step; a mark/space transition point calculation step (col. 3 lines 5-15); a bit point calculation step which decides a bit point based on a mark/space transition point calculated by said mark/space transition point calculation step; and a bit decision step which decides a bit value based on said bit point calculated by said bit point calculation step (col. 5 lines 15-44).

Consider claim 12, Ta et al teach wherein said bit point calculation step decides said bit point value during an interval excluding predetermined interval between a predetermined point before said mark/space transition point and another predetermined point after said mark/space transition point (col. 7 lines 24-44).

Consider claim 13, Ta et al teach an FSK signal demodulator comprising: a zero crossing point calculation unit; a zero crossing point interval calculation unit; a mark/space transition point calculation unit (col. 3 lines 5-15); a bit point calculation unit which decides a bit point based on a mark/space transition point calculated by said mark/space transition point calculation unit; and a bit decision unit which decides a bit value based on said bit point calculated by said bit point calculation step (col. 5 lines 15-44).

Consider claim 14, Ta et al teach wherein said bit point calculation unit decides said bit point value during an interval excluding predetermined interval between a predetermined point before said mark/space transition point and another predetermined point after said mark/space transition point (col. 7 lines 24-44).

Consider claim 15, Ta et al teach the FSK signal demodulator further comprising: an A/D converter which converts an input FSK signal to a digital FSK signal when said input FSK signal

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is an analog FSK signal; and a switch which selects either an output of said A/D converter or an input digital FSK signal, and supplies a selected digital FSK signal to said zero crossing point calculation unit (col. 2 line 60 – col. 3 line 9).

Consider claim 16, Ta et al teach the FSK signal demodulator further comprising: an A/D converter which converts an input analog FSK signal to a digital FSK signal when said input FSK signal is an analog FSK signal; and a switch which selects either an output of said A/D converter or an input digital FSK signal, and supplies a selected digital FSK signal to said zero crossing point calculation step (col. 2 line 60 – col. 3 line 9).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al (5,857,011) in view of Kennedy et al (5,937,034).

Consider claim 2, Kennedy et al teach a testing apparatus which is used to perform a test of an information notification service function of a switching apparatus which can provide the information notification service in compliance with a predetermined information notification service specification (see abstract), said testing apparatus comprising: a hardware block which can send and receive controls signals and information data using a voice band signal, which are in compliance with different information notification service specifications (col. 9 lines 54-67),

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by means of connecting said hardware block to a subscriber side two-wire in a subscriber line circuit in said switching apparatus (col. 9 line 47; col. 11 lines 11-25).

Kennedy et al '011 teach a control block which controls said hardware block using software can change a controlling operation (col. 9 line 54 – col. 10 line 20). Kennedy et al '011 did not suggest wherein the control block using software for changing the control operation by means of replacing said software according to the information notification service specification to be tested. However, Kennedy et al '034 suggested such (abstract; col. 1 lines 10-15).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to utilize the teaching of Kennedy et al '034 into view of '011 in order to provide various testing of different services.

Consider claim 3, Kennedy et al '011 and '034 did not suggest wherein said hardware block is constructed by a programmable device, and said control block can change said controlling operation by means of downloading said software. However, the examiner takes an official notice that it is well known in the art to change control operation by downloading software. Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to incorporate such teaching in order to provide various testing of different services.

Consider claim 4, Kennedy et al '034 teach wherein said control block change said controlling operation according to an information on a station data information in said switching apparatus or a test-mode instruction sent from said switching apparatus (abstract; col. 1 lines 10-15; col. 4 lines 13-44).

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7. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al (5,857,011) in view of Ta et al (6,272,184).

Consider claim 17, Kennedy et al teach a testing apparatus which is used to perform a test of an information notification service function of a switching apparatus which can provide the information notification service in compliance with a predetermined information notification service specification (abstract), said testing apparatus comprising: an FSK signal demodulator (col. 2 lines 60-65).

Kennedy et al did not further suggest wherein the FSK signal demodulator comprises; a zero crossing point calculation unit; a zero crossing point interval calculation unit; a mark/space transition point calculation unit; a bit point calculation unit which decides a bit point based on a mark/space transition point calculated by said mark/space transition point calculation unit; and a bit decision unit which decides a bit value based on said bit point calculated by said bit point calculation unit. However, Ta et al suggested such (col. 3 lines 5-15; col. 5 lines 15-44).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to take the FSK demodulation scheme of Ta et al apply into the test device of Kennedy et al in order to detect the caller ID signal.

Consider claim 18, Ta et al teach wherein said bit point calculation unit decides said bit point value during an interval excluding predetermined interval between a predetermined point before said mark/space transition point and another predetermined point after said mark/space transition point (col. 7 lines 24-44).

Consider claim 19, Ta et al teach the apparatus further comprising: an A/D converter which converts an input FSK signal to a digital FSK signal when said input FSK signal is an

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analog FSK signal; and a switch which selects either an output of said A/D converter or an input digital FSK signal, and supplies a selected digital FSK signal to said zero crossing point calculation unit (col. 2 line 60 – col. 3 line 9).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anderson, II et al (5,909,544) teach a system and method for downloading tests applications.

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231


Facsimile responses should be faxed to:
(703) 872-9314

Hand-delivered responses should be brought to:
Crystal Park II, 2121 Crystal Drive
Arlington, VA., Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Quoc Tran** whose telephone number is **(703) 306-5643**. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Curtis Kuntz**, can be reached on **(703) 305-4708**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600** whose telephone number is **(703) 306-0377**.



Quoc D. Tran
Patent Examiner AU 2643
October 8, 2003